

MULTIEXCHANGE AXIOMS OVER HYPERFIELDS

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(This talk is based on joint work with Changxin Ding and Chayim Lowen.)

Abstract: Given a matroid M whose ground set can be partitioned into two bases B and B' and a subset X of B , there is always a subset X' of B' such that both $B \setminus X \cup X'$ and $B' \setminus X' \cup B$ are bases. We examine analogues of this statement for matroids represented over hyperfields and analyse for which classes of hyperfield they generally hold.